surplus property proceedings. New York State land would have to be transferred by the state.

2. Transfer of Communities to the Seashore District Following Catastrophic Storms

A legislative amendment will also be required to provide for the transfer of existing communities from the development district to the seashore district following a catastrophic storm.

3. Transfer of Land from the Seashore District to the Development District

The entire 36-acre residential Ocean Ridge section of the community of Davis Park and the adjacent 5 acres of Davis Park lying immediately west of the eastern boundary of Leja Beach are now included within the seashore district of the national seashore, as defined in zoning standards promulgated by the Secretary of the Interior. The area contains about 115 improved properties and three unimproved properties. It was inadvertently included in an 8-mile-long zone in which the Secretary was empowered to condemn and acquire existing properties. The area is not essential for management of the seashore district. Further, it is closely tied to the exempted community of Davis Park, and should be subject to the same degree of federal involvement in its development. Legislation will therefore be requested in order to transfer this 41-acre tract from the seashore district to the development district of Fire Island National Seashore.

Transfer four parcels of already developed property along the western boundary of Water Island bounded on the west by Charach Walk (see figure 2, segment 4).

4. Additional Funding for Plan Implementation

A legislative amendment will be required to provide additional funds for land acquisition, management, and development, as recommended in this plan.

J. Interrelationships With Other Projects

1. Other Federally Administered Barrier Islands

The barrier islands of the eastern United States provide a topographic continuum for observing the ecological transition from the cold temperate climate of northern New England to the subtropical climate of Florida and the Gulf of Mexico. As one of the longest chains of major barrier islands in the world, this dynamic system is of global importance. About 21 percent of the total

barrier-island mileage of the United States is managed by the federal government. Over 400 miles of the barrier-island system are managed by the National Park Service in nine national seashores, the largest of which is 80-mile-long Padre Island National Seashore in Texas. Most other federal lands on barrier islands are managed as wildlife refuges by the U.S. Fish and Wildlife Service. Federal barrier-island holdings are scattered rather uniformly from Massachusetts to Texas. If these islands were managed as a continuous and dynamic ecological system under provisions of an ecologically compatible management program, perpetuation of the ecological diversity of the system would be virtually assured. If, on the other hand, different management programs were adopted on different islands (for instance, some stabilized to protect development, others allowed to evolve totally in response to natural forces of change), the continuity of the entire system--and therefore much of its value--would be jeopardized. All federal barrier-island lands, as well as other preserved tracts in the chain under non-federal ownership, are therefore affected by management programs adopted on Fire Island, just as Fire Island is affected by the ways other barrier islands are managed.

2. Suffolk County Department of Environmental Conservation

The Suffolk County Department of Environmental Conservation is responsible for monitoring activities that are planned or are being implemented within the lands and waters of the coastal zone, as defined in P.L. 92-583, Coastal Zone Management Act of 1972. Local governmental agencies that issue permits for construction or other alteration of existing natural conditions within the coastal zone must cooperate with state and federal agencies to ensure effective management, beneficial use, protection, and perpetuation of important natural resources. The National Park Service will cooperate with Suffolk County in the protection of the fragile coastal zone of Fire Island and adjacent lands under the jurisdiction of Suffolk County.

3. New York State Department of Environmental Conservation

As defined in P.L. 92-583, the state of New York must, in cooperation with federal and local governmental entities, develop an effective management program for the use of the lands and waters of the coastal zone. Management decisions and resulting actions by the National Park Service on Fire Island affect the coastal zone adjacent to Fire Island and Great South Bay. Thus, the national seashore staff will cooperate with the state of New York in developing an appropriate management plan for those coastal-zone areas affected by actions taken at Fire Island National Seashore.

4. Blue Point Company, Inc.

The Blue Point Company is a central figure in the vital shellfishing industry of Great South Bay. Authorization granted under the Dongan Patent gives the Blue Point Company exclusive shellfishing rights to approximately 6,000 acres of bay bottom in Great South Bay from the Blue Point community on Long Island's south shore to the waters adjacent to Talisman on Fire Island. Recreational clamming, which will be allowed in the bay waters just west of Talisman, must be carefully managed so that clammers do not interfere with the operations of the company. Recreational clamming is generally limited to the waters within 200 feet of the Fire Island shore adjacent to Talisman and in other locations where shellfishing rights are legally protected.

5. Community Associations of Fire Island

The Fire Island National Seashore managers and staff frequently communicate with members of community associations, such as the Fire Island Association, in attempts to integrate community needs and National Park Service objectives for protection and perpetuation of the barrier-beach system. Regulations imposed by the national seashore management have a direct influence on the lives of community residents, and continued cooperation and consultation between the national seashore staff and groups representing Fire Island communities will aid in increasing the effectiveness of regulatory measures while ensuring that park management takes into account the legitimate concerns of community residents and the impacts of National Park Service plans upon them.

6. Long Island State Parks and Recreation Commission

The Long Island State Parks and Recreation Commission maintains several major recreational developments in close proximity to the federally managed lands of Fire Island, and all of these developments will continue to affect and be affected by management of the national seashore. Transportation routes, facilities, recreational opportunities, and resource management objectives of the national seashore and both Robert Moses and Heckscher State Parks are closely interrelated (see figure 1). The proposed utilization of a portion of Heckscher State Park for a national seashore staging area will mutually benefit both agencies. The degree of development at Robert Moses State Park will directly affect public demand for recreational facilities and opportunities at the national seashore.

The provision of diverse recreational opportunities in the Long Island region that are not necessarily provided by the local and state governments will

remain the goal of the Park Service's cooperative planning efforts with the state.

7. Nassau-Suffolk Regional Planning Board

The Nassau-Suffolk Regional Planning Board is responsible for planning activities within the two-county region, which encompasses the communities of the immediate Fire Island region. Typical concerns include land use and transportation, as well as commercial, industrial, and recreational planning on Long Island. Future operations of Fire Island National Seashore are vitally linked to mainland communities, transportation patterns, the recreational needs of the region, and the Nassau-Suffolk County regional plan, which directs bi-county growth and development through 1980. Regional planning activities and those of the national seashore must be interwoven to optimize opportunities and planning efficiency.

8. Suffolk County Department of Parks and Recreation

Suffolk County operates a major high-density recreational facility at Smith Point County Park immediately east of the federally managed Smith Point West development (see figure 2, segment 6). An additional 5-mile segment of the national seashore is currently under Suffolk County ownership, and is heavily utilized by recreational-vehicle enthusiasts, mainly for surf-fishing and camping. This use has caused disturbance of the beach and dune environment--despite efforts by recreational-vehicle clubs to monitor environmental disruption and to maintain the dunes through conservation efforts. Suffolk County lands east of Smith Point County Park are transferred to the federal government. The county park will be bounded on the east and west by federal lands and integrally related to the national seashore. Access to the Moriches Inlet unit of the national seashore will be through the Suffolk County park, and must be coordinated closely with the county. Continuing federal/county cooperation is therefore critical if the recreational lands within the eastern segment of Fire Island are to be properly used and opportunities for diverse public use provided.

9. Suffolk County Police Department

The state of New York and Suffolk County have not relinquished jurisdiction over the seashore. National Park Service jurisdiction is proprietary on federal lands, where it enforces federal regulations but may call on the Suffolk County police for assistance in law enforcement and for emergency rescues. In the exempted communities, federal involvement is minimal, and the county police have responsibility for law enforcement.

The Police Marine Bureau conducts boat patrols in the bays; work in communities is concentrated in the marina areas. The patrol boats also provide transportation for police officers based on the island. The Police Operations Division runs Bell Jet Ranger II helicopters throughout the county. These helicopters are used from time to time to facilitate patrol of Fire Island. Designated helicopter and seaplane landing sites for Suffolk County police will be necessary for future law enforcement and for emergencies.

The Beach Patrol Division, a subunit of the Marine Bureau, is responsible for law enforcement in Fire Island's communities. Police vehicles are allowed access along the beach in front of federal lands and in certain areas behind the dunes. During the summer season, the police operate out of a headquarters at Davis Park, and maintain booths in Fire Island Pines, Cherry Grove, and Seaview, as well as footmen in most of the communities. The Beach Patrol Division intends to convert to a houseboat operation in the near future, utilizing three or four marina bases in the communities. The houseboat approach will facilitate mobility and reduce the need for vehicular travel on the beach. Ultimately, the division may police each community individually, and use the houseboat for a mobile operations base; travel between the communities would be by lateral boat-shuttles.

In winter, police operations on the island are reduced and most travel between communities is by vehicle along the beach. Service is limited to patrol checks.

In the western communities, the county police have limited authority to regulate vehicle use. Except for one road in Fire Island Pines that has been designated an official town road, none of the beach paths or roadways in the communities has been so designated. The county police therefore cannot issue summonses for vehicular violations, and unlicensed vehicles and drivers can use Fire Island without fear of police. In addition to federal controls, the town of Islip posts town police at the west end of the community to check for violation of Islip's vehicle-use ordinance. The town of Islip can issue summonses for violations of these regulations, but not for traffic violations.

The National Park Service will continue to cooperate with the Suffolk County Police Department to effect maximum protection and service to the residents of Fire Island and visitors to the seashore.

10. Suffolk County Vector Control Board

Mosquito and other pest control on seashore lands is currently managed by the Suffolk County Vector Control Board (formerly Mosquito Control Commission). By agreement with the National Park Service, the board's activities on Fire Island have been restricted to the control of the saltmarsh mosquito (*Aedes solicitans*), one of about 30 mosquito species known in the area, and one of three species capable of flying across the bay to annoy Long Island residents. Traditional control methods have included the use of pesticides and the ditching of marshes along the bayside of Fire Island. Known and probable adverse ecological impacts have resulted from alteration of drainage patterns, water table levels, and ecological structure within the marshes, as well as by the biological amplification of pesticides in the food webs of aquatic and terrestrial biota. Less desirable plant species such as groundsel bush and marsh elder have invaded the tidal marshes, further disrupting natural conditions. Existing agreements with the Vector Control Board will be modified to prohibit all ditching and other mosquito-control practices within the national seashore (see section I.C.3.). Continuing cooperation between the National Park Service and the Vector Control Board will be necessary to facilitate restoration of undisturbed conditions in the marshes to the greatest extent possible.

11. United States Department of the Army, Corps of Engineers

Public Law 88-587 states that "the authority of the Chief of Engineers, Department of the Army, to undertake or contribute to shore erosion control or beach protection measures on lands within the Fire Island National Seashore shall be exercised in accordance with a plan that is mutually acceptable to the Secretary of the Interior and the Secretary of the Army and that is consistent with the purpose of this Act."

On October 21, 1974, the Corps of Engineers issued Public Notice No. 7871, "Fire Island Inlet to Montauk Point--New York Beach Erosion Control and Hurricane Protection--Moriches Inlet to Shinnecock Inlet Beach." The project would provide for improvements to serve the dual purpose of beach-erosion control and hurricane protection along five sections of the Atlantic Coast of Long Island from Fire Island Inlet to Montauk Point; it would further provide for federal participation in periodic funding of beach nourishment for a period of 10 years after completion of the project. The initial construction work would consist of widening the beach along developed areas between Kismet and Mecox Bay to a minimum width of 100 feet at 14 feet above mean sea level, and raising dunes to an elevation of 20 feet above mean sea level from Fire Island Inlet to Hither Hills State Park at Montauk, supplemented by grass

planting on the dunes, interior drainage structures, and construction of 50 groins, if needed.

Dredging (except to maintain navigational channels) and traditional methods of barrier-island stabilization objectives of the national seashore will not be implemented within the seashore's boundaries. Coastal engineering projects planned by the Corps of Engineers will be evaluated for their possible effects on the natural evolution of Fire Island. Projects contemplated for the area between Southampton and Moriches Inlet involving interruption of the littoral transport of sediment, such as the proposed completion of the Westhampton groin field, will receive particularly detailed evaluation with respect to their probable effects on erosion and sedimentation patterns on Fire Island. The National Park Service and the U.S. Fish and Wildlife Service have already gone on record as opposing the Westhampton groin field. Alternative strategies for beach management in this area are presently being evaluated.

Resources management proposals for artificial marsh building, creation of dredge-spoil islands, erosion control, and beach nourishment will require close cooperation with the Corps of Engineers. The existing Corps of Engineers program for hurricane protection and erosion control includes many of the proposed manipulations recommended by the general management plan. Continuing cooperation will be needed to facilitate construction of environmentally compatible sand-bypass systems at inlets for augmentation of the littoral drift, as well as implementation of limited dune repair efforts and beach nourishment utilizing sand dredged from offshore. Within the seashore boundaries, all Corps of Engineers projects will be closely scrutinized and controlled by the National Park Service. Outside the park, Corps of Engineers projects will require close cooperation with the National Park Service to ensure that the seashore's resources are not adversely affected.

12. United States Department of Transportation, Coast Guard

Presently, the National Park Service has a special-use agreement with the Coast Guard to use the Fire Island Lighthouse and certain Coast Guard facilities west of Kismet for interpretive and management purposes. This use-agreement will be terminated following the transfer of the lighthouse tract (90 acres) through surplus property agreements.

Licensing of ferries, inspection of marina facilities, and Coast Guard patrols will continue, although direct communication with the National Park Service will remain minor.

13. Village of Patchogue

The proposed Fire Island National Seashore headquarters area will be located on the bank of the Patchogue (see figure 10). Cooperation with Patchogue residents will be required to ensure that the future design and operation of the headquarters is compatible with the character of the community. Cooperative planning will be necessary to minimize any potentially adverse effects of the proposal on the community.

Cooperative planning efforts between the National Park Service and the village of Patchogue will be necessary to ensure that future land use surrounding the proposed ferry terminal area is compatibile with the National Park Service facility. Particular attention should focus on developing a quality aesthetic surrounding for the ferry terminal/seashore headquarters facility.